LISTING OF CLAIMS:

Claim 1. (original): Biodegradable, phase separated multiblock copolymer, comprising segments of a soft biodegradable prepolymer (A) having a Tg lower than 37°C; and segments of a hard biodegradable prepolymer (B) having a Tm of 40- 100°C, the segments being linked by a multifunctional chain-extender.

Claim 2. (original): Copolymer according to claim 1, wherein said chain-extender is an aliphatic chain-extender.

Claim 3. (currently amended): Copolymer according to claim 1 ~~or 2~~, wherein prepolymer (A) comprises ester and/or carbonate groups, optionally in combination with polyethers.

Claim 4. (currently amended): Copolymer according to claim 1 ~~any of the previous claims~~, wherein a polyether is present as an additional prepolymer.

Claim 5. (currently amended): Copolymer according to claim 2 ~~claims 2—4~~, wherein prepolymer (A) comprises reaction products of ester forming monomers selected from diols, dicarboxylic acids and hydroxycarboxylic acids.

Claim 6. (currently amended): Copolymer according to claim 1 ~~any of the previous claims~~, wherein prepolymer (A) comprises reaction products of cyclic monomers and/or non-cyclic monomers.

Claim 7. (original): Copolymer according to claim 6, wherein said cyclic monomers are selected from glycolide, lactide (L, D or L/D), ϵ-caprolactone, δ-valerolactone trimethylene carbonate, tetramethylenecarbonate, 1, 5-dioxepane-2-one, 1, 4-dioxane-2-one (*para*-dioxanone) and/or cyclic anhydrides such as oxepane-2, 7-dione.

Claim 8. (currently amended): Copolymer according to claim 5 ~~or 6~~, wherein said non-cyclic monomers are selected from succinic acid, glutaric acid, adipic acid, sebacic acid, lactic acid, glycolic acid, hydroxybutyric acid, ethylene glycol, diethyleneglycol, 1, 4-butanediol and/or 1, 6-hexanediol.

Claim 9. (currently amended): Copolymer according to claim 2 ~~–8~~, wherein said polyethers are selected from PEG (polyethylene glycol), PEG-PPG (polypropylene glycol), PTMG (polytetramethyleneether glycol) and combinations thereof.

Claim 10. (currently amended): Copolymer, according to claim 1 ~~any of the previous claims~~, in particular a copolymer having a random monomer distribution, wherein prepolymer (A) is prepared by a ring-opening polymerisation initiated by a diol or di-acid compound.

Claim 11. (original): Copolymer according to claim 9, wherein PEG is an initiator with a molecular weight of 150-4000, preferably of 150-2000, more preferably of 300-1000.

Claim 12. (currently amended): Copolymer according to claim 1 ~~any of the previous claims~~, wherein prepolymer (B) is prepared by a ring-opening polymerisation initiated by a diol or di-acid compound.

Claim 13. (currently amended): Copolymer according to claim 1 ~~any of the previous claims~~, wherein prepolymer (B) contains a crystallisable amount of ϵ-caprolactone, δ-valerolactone, para-dioxanone, polyhydroxyalkanoate, aliphatic polyanhydride.

Claim 14. (original): Copolymer according to claim 13, wherein pre-polymer (B) is poly-ϵ-caprolactone.

Claim 15. (original): Copolymer according to claim 14, wherein pre-polymer (B) has a Mn of larger than 1000, preferably larger than 2000, more preferably larger than 3000.

Claim 16. (currently amended): Copolymer according to claim 14 ~~or 15~~ wherein the content of prepolymer (B) is 10-90 wt.% preferably 30-50 wt.%.

Claim 17. (currently amended): Copolymer according to claim 1 ~~any of the previous claims~~, having an intrinsic viscosity of at least 0.1 dl/g, and preferably between 1-4 dl/g.

Claim 18. (currently amended): Process for preparing a copolymer according to claim 1 ~~any of the previous claims~~, comprising a chain extension reaction of prepolymer (A) and prepolymer (B) in the presence of a suitable aliphatic chain extender, whereby a randomly segmented multi-block copolymer is obtained.

Claim 19. (original): Process according to claim 18, wherein said chain extender is a difunctional aliphatic molecule.

Claim 20. (original): Process according to claim 19, wherein said difunctional aliphatic molecule is a diisocyanate, preferably butanediisocyanate.

Claim 21. (currently amended): Process for preparing a copolymer according to claim 1 ~~any of the claims 1-17~~, comprising a coupling reaction, wherein pre-polymers A and B are both diol or di-acid ~~diacid~~ terminated and the chain-extender is di-carboxylic acid or diol terminated, respectively, using a coupling agent.

Claim 22. (original): Process according to claim 21, wherein the coupling agent is dicyclohexyl carbodiimide (DCC).

Claim 23. (currently amended): Process for preparing a copolymer according to claim 1 ~~any of the claims 1 – 17~~, comprising a coupling reaction, wherein a BAB-prepolymer is made by reacting a prepolymer (A) with monomers which form prepolymer (B), thus obtaining a BAB-tri-block prepolymer, which is subsequently chain-extended using a multifunctional chain-extender.

Claim 24. (currently amended): Process for preparing a copolymer according to claim 1 ~~any of the claims 1 – 17~~, comprising a coupling reaction, wherein a ABA-prepolymer is made by reacting a pre-polymer (B) with monomers that form prepolymer (A), thus obtaining an ABA-tri-block pre-polymer, which is subsequently chain-extended using a multifunctional chain-extender.

Claim 25. (currently amended): Process according to claim 18 ~~any of the previous claims 18-24~~, wherein said chain-extender is selected from diisocyanate (preferably butanediisocyanate), di-carboxylic acid or diol, optionally in the presence of a coupling agent.

Claim 26. (currently amended): Use of a copolymer according to claim 1. ~~claim 1 – 17 or the copolymer obtainable by the process of claim 18 – 25 as an implant or in drug delivery~~.

Claim 27. (currently amended): Sponge, implant, nerve guide, meniscus prosthesis, film, foil, sheet, drug eluting coatings, membrane, plug, coating or micro-spheres comprising a

copolymer according to claim 1. ~~-17 or the copolymer obtainable by the process of claim 18-25.~~

Claim 28. (original): Sponge according to claim 24 having a porosity of 50-99%.

Claim 29. (new): Use of a copolymer obtainable by the process of claim 18.

Claim 30. (new): Sponge, implant, nerve guide, meniscus prosthesis, film, foil, sheet, drug eluting coatings, membrane, plug, coating or micro-spheres comprising a copolymer obtainable by the process of claim 18.